

Application Serial No. 09/856,815

Page 5 of 8

Date March 12, 2004

Reply to Office Action dated December 15, 2003

REMARKS

After entry of this Amendment, claims 1-18 are pending in the application. Claim 1 has been amended to more particularly point out and distinctly claim the subject matter the Applicants regard as the invention. The amendment to claim 1 does not raise the issue of new matter and will not require further search. Reconsideration of the Application as amended is requested.

Claims 1-6, 8, 9 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura et al. (U.S. Patent No. 4,636,643) in view of Teder (U.S. Patent No. 6,262,407). The Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the intensity, duration, or frequency of a ray emitted from the radiation source and analyze a portion of the ray based on the intensity, duration, and frequency control as taught by Teder in the device of Nakamura et al. Claim 1 has been amended to more particularly point out and distinctly claim that the controller of the device for detecting particles on a windshield is operable to analyze the ray for the purposes of detecting the presence of particles on the windshield. None of the cited references, however, taken individually or in any permissible combination, teaches or suggests, a single control unit operable to selectively control the intensity, duration or frequency of a ray emitted by the radiation source. Nor do the cited references, taken individually or in any permissible combination, teach or suggest a controller that is operable to analyze the received ray, for purposes of detecting particle on the windshield, based at least in part on the previously selected intensity, duration, or frequency of the emitted ray. More specifically, the intensity control unit (50) in Teder is not configured to select an intensity level of the radiation signal emitted from emitter (40). Rather, the control unit (50) functions to set the intensity of the radiation signal received by detector (44) to a predetermined fixed reference level when the device is powered up, and periodically thereafter (see column 9, lines 8-13 and 20-38). This is accomplished by adjusting the intensity level of the radiation signal emitted from emitter (40) to a level that results in the radiation signal received by detector (44) being at the fixed reference intensity level. Nowhere does Teder

Application Serial No. 09/856,815

Page 6 of 8

Date March 12, 2004

Reply to Office Action dated December 15, 2003

disclose that the intensity level of emitted radiation signal can be set to anything other than that which is required to achieve a reference level intensity at the detector.

Furthermore, Teder, nor any of the other references, analyze the radiation signal received by the detector based on the previously selected intensity, duration or frequency of the emitted beam. For example, Teder only considers the intensity level of the emitted signal while adjusting the intensity of the emitted signal to achieve a reference intensity level at the detector during the start up phase. The intensity level of the emitted radiation signal is not considered when analyzing the received beam for purpose of detecting the presence of particles on the windshield. It is only after the intensity level of the emitted radiation signal has been adjusted to achieve the fixed reference level intensity at the detector does the control unit (50) begin scanning for particles on the windshield. During the period in which the intensity level of the radiation signal is being adjusted, the control unit (50) activates a blanking signal generator (59) that sends a blanking signal to the moisture sensing circuitry (see column 9, lines 46-63). This is done to prevent the moisture detecting circuitry from falsely detecting moisture on the windshield. Thereafter, the moisture detecting circuitry compares the intensity of the received signal to the reference level intensity for determining if particles are present on the windshield without considering the intensity level of the emitted signal. It is therefore submitted that claim 1 patentably defines over the cited references and is in suitable condition for allowance. Claims 2-6, 8 and 17 depend from claim 1 and are therefore also in suitable condition for allowance. Applicant accordingly requests that Examiner's rejection of claim 1 be reconsidered and withdrawn.

Regarding claim 9, the Examiner asserts that Nakamura et al. teaches a control unit for managing the radiation source in such a way that the type of particles can be determined from the rays received by the photodetector. Applicant has carefully reviewed the Nakamura et al. reference and has been unable to locate any reference to the fact that the device in Nakamura et al. is capable of discerning the type of particles present on the windshield. Nakamura et al. teaches that any decrease in the intensity beyond a certain predetermined level of the beam received by the

Application Serial No. 09/856,815

Page 7 of 8

Date March 12, 2004

Reply to Office Action dated December 15, 2003

infrared receiving means (5) is interpreted as indicating the presence of fog on the windshield (see column 3, lines 52-56, column 4, lines 26-30). Although Nakamura et al. discloses a procedure whereby the reference intensity of the beam can be adjusted to account for the presence of contaminants, other than fog, on the windshield, nowhere is it disclosed that the device is capable of determining the type of particles present on the windshield. It is therefore submitted that claim 9 is patentable over Nakamura et al. Applicant accordingly requests that Examiner's rejection of claim 9 be reconsidered and withdrawn.

Claims 7, 11-15, and 18 stand rejected under 35 U.S.C. §103(a) over various combinations of the cited references. However, it is respectfully submitted that Applicants' invention as set forth in these claims, each of which depends directly or indirectly from claim 1, patentably defines over the cited references as combined by the Examiner for the same reasons set forth above with respect to the patentability of Applicants' invention over Nakamura et al in view of Teder.

It is respectfully submitted that this Amendment traverses and overcomes all of the Examiner's objections and rejections to the application as originally filed. It is further submitted that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the application.

This amendment should be entered because it does not add new matter to the application. This amendment does not raise new issues requiring further search or consideration by the examiner. Specifically, the Examiner has previously considered a control unit that is operable to selectively control the intensity, duration or frequency of a ray used to detect particles on windshield of a vehicle as recited in claim 1. The language added to claim 1 upon entry of this amendment merely restates what is previously recited elsewhere in the claim. Accordingly, the amendment should be entered because it does not add new claims without cancelling a corresponding number of claims. Alternatively, this amendment should be entered since it is the first opportunity Applicant has had to respond to new rejections first raised by the

Application Serial No. 09/856,815

Page 8 of 8

Date March 12, 2004

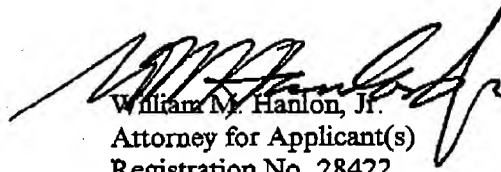
Reply to Office Action dated December 15, 2003

Examiner in the Office Action dated December 15, 2003. Finally, this amendment should be entered because it simplifies the issues on appeal.

If the Examiner feels that prosecution of the present application can be expedited by way of an Examiner's amendment, the Examiner is invited to contact the Applicant's attorney at the telephone number listed below.

Respectfully submitted,

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